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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/757,323
Filing Date: January 14, 2004
Appellant(s): GULER ET AL.

Ashek Mannava
Reg. No. 45,301
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed September 8, 2008 appealing from the Office action mailed September 8, 2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The appellant and examiner are not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

- U.S. 7,110,976 Heimermann
- U.S. 5,809,282 Cooper
- U.S. Pub 2004/0006503 Jarvis
- Pinker et al., Using Transaction Data for the Design of Sequential, Multi-Unit Online Auctions, University of Rochester, William E. Simon Graduate School of Business Administration, Computer and Information Working Paper Series No. CIS 00-03, October 2001
- Wurman et al., Specifying Rules for Electronic Auctions, July 11, 2002
- Dumas et al., A Probabilistic Approach to Automated Bidding in Alternative Auctions, International World Wide Web Conference, ACM Press, 2002, pp. 99-108

(9) Grounds of Rejection

Claim Rejections – 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2 are rejected under U.S.C. 103(a) as being unpatentable over Pinker et al., Using Transaction Data for the Design of Sequential, Multi-Unit Online Auctions, University of Rochester, William E. Simon Graduate School of Business Administration, Computer and Information Working Paper Series No. CIS 00-03, October 2001 ("Pinker"), in view of Heimermann, U.S. 7,110,976 ("Heimermann"), and further in view of Wurman et al., Specifying Rules for Electronic Auctions, July 11, 2002 ("Wurman").

Re claim 1 (currently amended), Pinker discloses the limitation of a *method of evaluating sequencing rules for a multiple lot auction, comprising:*

- *obtaining a next set of bids from a plurality of simulated bidders* (page 10, paragraph 1);
- *simulating the multiple lot auction using the next set of bids and a sequencing rule until simulated bidding on all lots is closed* (page 9, paragraphs 2-3; page 10, paragraph 1);
- *simulating the multiple lot auction using a different sequencing rule until bidding on all lots is closed* (page 2, paragraph 2).

Pinker doesn't explicitly disclose the limitation comprising *comparing results of the simulated auctions with both sequencing rules.* Heimermann, however, teaches wherein the process where comparative analysis is applied to outcomes of prior purchase experience in reverse auctions, in particular, with regard to cost of goods and services purchased (see at least column 36, lines 32-43). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as disclosed by Pinker, with the method, as taught by Heimermann, for the motivation of deriving cost-effective procurement strategies and a rule-based decision structure of reverse-auction purchasing tactics (see at least Heimermann, column 36, lines 37-43).

Pinker also doesn't explicitly disclose the limitation *wherein the sequencing rules determine how closing times for accepting any bids are ordered among each of the lots.* Wurman, however, makes this teaching (page 11, paragraph 6; page 12, paragraphs 1-3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as

disclosed by Pinker, with the method, as taught by Wurman, for the motivation of specifying the logical conditions that close an auction (Wurman, page 12, paragraph 2).

Re claim 2, Pinker in view of Heimermann in view of Wurman teaches the limitations of claim 1 as described above. Pinker further teaches the limitation *wherein simulating the multiple lot auction with each sequencing rule comprises simulating a multiple lot auction* (page 9, paragraphs 2-3; page 10, paragraph 1).

Pinker doesn't explicitly disclose the limitation wherein the multiple lot auction comprises *a reverse auction.* Heimermann, however, teaches where an auction may be a reverse-auction-based system (column 3, lines 56-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Pinker, with the method, as taught by Heimermann, for the motivation of analyzing situations wherein services and/or goods are procured from suppliers participating in a lowest-price bidding process (see at least Heimermann, column 11, lines 26-33).

Claims 3-7 are rejected under U.S.C. 103(a) as being unpatentable over Pinker et al., Using Transaction Data for the Design of Sequential, Multi-Unit Online Auctions, University of Rochester, William E. Simon Graduate School of Business Administration, Computer and Information Working Paper Series No. CIS 00-03, October 2001 ("Pinker"), in view of Heimermann, U.S. 7,110,976 ("Heimermann"), in view of Wurman et al., Specifying Rules for Electronic Auctions, July 11, 2002 ("Wurman"), and further in view of Dumas et al., A Probabilistic Approach to Automated Bidding in Alternative Auctions, International World Wide Web Conference, ACM Press, 2002, pp. 99-108, ("Dumas").

Re claim 3, Pinker in view of Heimermann in view of Wurman teaches the limitations of claim 1 as described above. Pinker doesn't explicitly disclose the limitation *wherein simulating the multiple lot*

auction with each sequencing rule further comprises processing a bid from the next set of bids. Dumas, however, makes this teaching (page 105, column 1, paragraphs 1 and 4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Pinker, with the method, as taught by Dumas, for the motivation of simulating an auction market.

Re claim 4, Pinker in view of Heimermann in view of Wurman teaches the limitations of claim 3 as described above. Pinker doesn't explicitly disclose the limitation *wherein processing a bid from the next set of bids comprises at least one act selected from a group consisting of recording the bid, resetting a closing time, and permitting each simulated bidder to be informed of the bid being processed* Dumas, however, makes this teaching (page 105, column 1, paragraph 4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Pinker, with the method, as taught by Dumas, for the motivation of simulating an auction market.

Re claim 5, Pinker in view of Heimermann in view of Wurman teaches the limitations of claim 1 as described above. Pinker doesn't explicitly disclose the limitation *wherein obtaining the next set of bids comprises determining, for each of a plurality of simulated bidders, whether the bidder is to submit a bid, when the bidder is to submit a bid, and an amount of the bid.* Dumas, however, makes this teaching (page 103, column 2, paragraph 5; page 105, column 1, paragraph 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Pinker, with the method, as taught by Dumas, for the motivation of simulating an auction market.

Re claim 6, Pinker in view of Heimermann in view of Wurman teaches the limitations of claim 5 as described above. Pinker doesn't explicitly disclose the limitation *wherein, if a simulated bidder submits a bid, the bid is submitted according to a random time interval.* Dumas, however, makes this teaching (page 103, column 2, paragraph 5; page 104, column 1, paragraph 3). It would have been obvious to

one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Pinker, with the method, as taught by Dumas, for the motivation of simulating an auction market.

Re claim 7, Pinker in view of Heimermann in view of Wurman teaches the limitations of claim 1 as described above. Pinker doesn't explicitly disclose the limitation *wherein simulating the multiple lot auction comprises simulating auction time.* Dumas, however, makes this teaching (page 104, column 1, paragraph 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Pinker, with the method, as taught by Dumas, for the motivation of simulating an auction market.

Claim 8 is rejected under U.S.C. 103(a) as being unpatentable over Pinker et al., Using Transaction Data for the Design of Sequential, Multi-Unit Online Auctions, University of Rochester, William E. Simon Graduate School of Business Administration, Computer and Information Working Paper Series No. CIS 00-03, October 2001 ("Pinker"), in view of Heimermann, U.S. 7,110,976 ("Heimermann"), in view of Wurman et al., Specifying Rules for Electronic Auctions, July 11, 2002 ("Wurman"), and further in view of Jarvis, U.S. Pub 2004/0006503 ("Jarvis").

Re claim 8, Pinker in view of Heimermann in view of Wurman teaches the limitations of claim 1 as described above. Pinker doesn't explicitly disclose the limitation *wherein comparing results comprises, for each simulated auction, determining a metric selected from a group consisting of total procurement cost of all of the lots in the multiple lot auction, average procurement cost per lot, and mean procurement cost per lot.* Jarvis, however, teaches wherein supplier-specific cost measures consisting of total cost, average cost and mean cost are calculated and utilized (paragraphs 11, 13 and 23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Pinker, with the method, as taught by

Jarvis, for the motivation of establishing a cost model which can be used to obtain lower prices (Jarvis, Abstract, lines 4-9).

Claims 9-13, 18-21 are rejected under U.S.C. 103(a) as being unpatentable over Pinker et al., Using Transaction Data for the Design of Sequential, Multi-Unit Online Auctions, University of Rochester, William E. Simon Graduate School of Business Administration, Computer and Information Working Paper Series No. CIS 00-03, October 2001 ("Pinker"), in view of Wurman et al., Specifying Rules for Electronic Auctions, July 11, 2002 ("Wurman"), and further in view of Jarvis, U.S. Pub 2004/0006503 ("Jarvis").

Re claim 9 (currently amended), Pinker discloses the limitation of *a storage medium containing code that can be executed by a processor and, when executed, causes the processor to:*

- *select a first sequencing rule that dictates how multiple lots in a multiple lot auction are to be auctioned* (page 9, paragraphs 2-3; page 10, paragraph 1);
- *simulate a multiple lot auction using said first sequencing rule until bidding on all lots is closed* (page 9, paragraphs 2-3; page 10, paragraph 1);
- *select a second sequencing rule, simulate the multiple lot auction using said second sequencing rule until simulated bidding on all lots is closed, and evaluate results of the auction* (page 2, paragraph 2).

Pinker doesn't explicitly disclose the limitation *evaluating results of the auction, wherein the sequencing rules determine how closing times for accepting any bids are ordered among each of the lots.* Wurman, however, makes this teaching (page 11, paragraph 6; page 12, paragraphs 1-3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as disclosed by Pinker, with the method, as taught by Wurman, for the motivation of specifying the logical conditions that close an auction (Wurman, page 12, paragraph 2).

Pinker doesn't explicitly disclose the limitation *determining a metric for each simulated auction*. Jarvis, however, teaches wherein supplier-specific cost measures consisting of total cost, average cost and mean cost are calculated and utilized (paragraphs 11, 13 and 23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Pinker, with the method, as taught by Jarvis, for the motivation of establishing a cost model which can be used to obtain lower prices (Jarvis, Abstract, lines 4-9).

Re claim 10, Pinker in view of Wurman in view of Jarvis teaches the limitations of claim 9 as described above. Pinker doesn't explicitly disclose the limitation *wherein the metric comprises a metric selected from a group consisting of total cost of all of the lots in the multiple lot auction, average cost per lot, and mean cost per lot*. Jarvis, however, teaches wherein supplier-specific cost measures consisting of total cost, average cost and mean cost are calculated and utilized (paragraphs 11, 13 and 23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Pinker, with the method, as taught by Jarvis, for the motivation of establishing a cost model which can be used to obtain lower prices (Jarvis, Abstract, lines 4-9).

Re claim 11, Pinker in view of Wurman in view of Jarvis teaches the limitations of claim 9 as described above. Pinker doesn't explicitly disclose the limitation *wherein the code further causes the processor to compare the metrics from the simulated auctions*. Jarvis, however, teaches wherein supplier-specific cost measures consisting of total cost, average cost and mean cost are calculated and utilized (paragraphs 11, 13 and 23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Pinker, with the method, as taught by Jarvis, for the motivation of establishing a cost model which can be used to obtain lower prices (Jarvis, Abstract, lines 4-9).

Re claim 12, Pinker in view of Wurman in view of Jarvis teaches the limitations of claim 9 as described above. Pinker doesn't explicitly disclose the limitation *wherein the code further causes the processor*

to model behavior of a plurality of simulated bidders. Jarvis, however, teaches wherein modeling behavior of a bidder is one of the objectives of the simulated experiment (page 107, column 1, paragraph 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Pinker, with the method, as taught by Jarvis, for the motivation of predicting the probability of being successful in an auction with a given bid (Jarvis, page 107, column 1, paragraph 1).

Re claim 13 (currently amended), Pinker discloses the limitation of a system, comprising *simulation of a multiple lot auction using a plurality of sequencing rules* (page 9, paragraphs 2-3; page 10, paragraph 1).

Pinker doesn't explicitly disclose the limitation *wherein the sequencing rules determine how closing times for accepting any bids are ordered among each of the lots.* Wurman, however, makes this teaching (page 11, paragraph 6; page 12, paragraphs 1-3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as disclosed by Pinker, with the method, as taught by Wurman, for the motivation of specifying the logical conditions that close an auction (Wurman, page 12, paragraph 2).

Pinker doesn't explicitly disclose the limitation *determining a metric associated with each simulated multiple lot auction, the metric usable to evaluate results of the simulated multiple lot auction.* Jarvis, however, teaches wherein supplier-specific cost measures consisting of total cost, average cost and mean cost are calculated and utilized (paragraphs 11, 13 and 23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Pinker, with the method, as taught by Jarvis, for the motivation of establishing a cost model which can be used to obtain lower prices (Jarvis, Abstract, lines 4-9).

Pinker doesn't explicitly disclose the limitations comprising *a processor; and a storage coupled to the processor and containing an application that is executable by the processor; wherein, when executed, the application causes the processor to simulate a multiple lot auction.* However, further apparatus claims would have been obvious in order to perform the previously rejected method claims, and are therefore rejected using the same art and rationale.

Re claim 18 (currently amended), further apparatus claims would have been obvious in order to perform the previously rejected method claims, and are therefore rejected using the same art and rationale.

Re claims 19-21, further apparatus claims would have been obvious in order to perform the previously rejected method claims, and are therefore rejected using the same art and rationale.

Claims 14, 16-17 are rejected under U.S.C. 103(a) as being unpatentable over Pinker et al., Using Transaction Data for the Design of Sequential, Multi-Unit Online Auctions, University of Rochester, William E. Simon Graduate School of Business Administration, Computer and Information Working Paper Series No. CIS 00-03, October 2001 ("Pinker"), in view of Wurman et al., Specifying Rules for Electronic Auctions, July 11, 2002 ("Wurman"), in view of Jarvis, U.S. Pub 2004/0006503 ("Jarvis"), in view of Dumas et al., A Probabilistic Approach to Automated Bidding in Alternative Auctions, International World Wide Web Conference, ACM Press, 2002, pp. 99-108, ("Dumas"), and, further in view of Cooper, U.S. 5,809,282 ("Cooper").

Re claim 14, Pinker in view of Wurman in view of Jarvis teaches the limitation of claim 13 as described above. Pinker doesn't explicitly disclose the limitation comprising *incompatible lot auctions*. Dumas, however, makes this teaching (page 99, column 2, paragraph 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Pinker, with the method, as taught by Dumas, for the motivation of detecting and resolving incompatibilities between auctions.

Pinker doesn't explicitly disclose the limitation *wherein the processor prevents a simulated bidder from winning two lots that are incompatible.* Cooper, however, teaches the use of IF-THEN rules with specific regard to the setting of conditions or limits in the architecture of a system in a simulation process (column 10, lines 36-47). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Pinker, with the method, as taught by Cooper, for the motivation of meeting or accommodating user-preference requirements (Cooper, column 11, lines 1-4).

Re claims 16 & 17, Pinker in view of Wurman in view of Jarvis in view of Dumas discloses the limitation of claim 15 as described above. Pinker doesn't explicitly disclose the limitations *wherein the processor eliminates lots from bidding by a simulated bidder if the expected utility gain value for that lot and bidder is less than a threshold; and, if the expected utility gain value for that lot and bidder is less than a maximum value.* Cooper, however, discloses the use of IF-THEN rules with specific regard to the setting of conditions or limits in the architecture of a system in a simulation process (column 10, lines 36-47). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Pinker, with the method, as taught by Cooper, for the motivation of meeting or accommodating user-preference requirements (Cooper, column 11, lines 1-4).

Claim 15 is rejected under U.S.C. 103(a) as being unpatentable over Pinker et al., Using Transaction Data for the Design of Sequential, Multi-Unit Online Auctions, University of Rochester, William E. Simon Graduate School of Business Administration, Computer and Information Working Paper Series No. CIS 00-03, October 2001 ("Pinker"), in view of Wurman et al., Specifying Rules for Electronic Auctions, July 11, 2002 ("Wurman"), in view of Jarvis, U.S. Pub 2004/0006503 ("Jarvis"), in view of Dumas et al., A Probabilistic Approach to Automated Bidding in Alternative Auctions, International World Wide Web Conference, ACM Press, 2002, pp. 99-108, ("Dumas").

Re claim 15, Pinker in view of Wurman in view of Jarvis teaches the limitation of claim 13 as described above. Pinker doesn't explicitly disclose the limitation *wherein the processor determines, for each lot, an expected utility gain value for each of a plurality of simulated bidders.* Dumas, however, makes this teaching (page 103, column 1, paragraph 3; column 2, paragraph 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Pinker, with the method, as taught by Dumas, for the motivation of comparing auctions.

Claim 22 is rejected under U.S.C. 103(a) as being unpatentable over Pinker et al., Using Transaction Data for the Design of Sequential, Multi-Unit Online Auctions, University of Rochester, William E. Simon Graduate School of Business Administration, Computer and Information Working Paper Series No. CIS 00-03, October 2001 ("Pinker"), in view of Wurman et al., Specifying Rules for Electronic Auctions, July 11, 2002 ("Wurman"), and further in view of Jarvis, U.S. Pub 2004/0006503 ("Jarvis"), in view of Heimermann, U.S. 7,110,976 ("Heimermann").

Re claim 22, Pinker in view of Wurman in view of Jarvis teaches the limitation of claim 18 as described above. Pinker doesn't explicitly disclose the limitation *wherein the multiple lot auction comprises a reverse auction*. Heimermann, however, teaches where an auction may be a reverse-auction-based system (column 3, lines 56-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Pinker, with the method, as taught by Heimermann, for the motivation of analyzing situations wherein services and/or goods are procured from suppliers participating in a lowest-price bidding process (see at least Heimermann, column 11, lines 26-33).

(10) Response to Argument

Claims 1-2

With regard to claims 1-2, Appellants argue that Pinker, Heimermann and Wurman do not disclose the recited feature comprising using different sequencing rules to simulate an auction.

The Office strongly and respectfully disagrees, and maintains that the prior art references, used in rejecting the claims, clearly and expressly discloses all the recited features of the claims, as currently presented, and that Applicant has misinterpreted and/or not fully considered all the teachings and disclosures of the prior arts of record.

Appellants' invention discloses:

> "A system and method comprises simulating a multiple lot auction using a sequencing rule until bidding on all lots is closed, simulating the multiple lot auction using a different sequencing rule until bidding on all lots is closed, and comparing results of the simulated auctions with both sequencing rules." (Abstract)

Pinker discloses as his work a method for using transaction data for the design of sequential, multi-unit, online auctions. The paper focuses on the design of sequential auctions of multiple units of the

same good. Pinker investigates how available inventory should be divided into multiple lots and how many sequential auctions should be run. Pinker also looks into the effect of auction lot size on the closing price and develops a model for allocating inventory across multiple auctions. As such, the teachings of Pinker are found in a field of endeavor, which, while not unrelated, is also within the scope and reasoning of one of ordinary skill in the art. Pinker is relied upon to disclose the recited feature comprising:

- Simulating the multiple lot auction using a different sequencing rule until bidding on all lots is closed.

The 02 February 2008 Office Action points to Pinker, page 2, par. 2; page 5, par. 1-3; page 6, par. 1; page 9, par. 2-3; page 10, par. 1, which recites:

"Solving the dynamic programming formulation, we prove that the lot size drops from period to period. The intensity of the decline increases in the holding costs and the website's traffic intensity, while decreasing in the dispersion of consumer's valuations of the good. Finally, we extend this model to dynamically incorporate the results of previous auctions as feedback into the design of consecutive auctions, updating the lot size and number of auctions. We demonstrate how information signals from previous auctions should be used to update the auctioneer's belief about the customer's valuation distribution, thereby increasing the sellers' profit potential. We use several examples to show how the benefits of using detailed transaction data for the design of sequential, multi-unit, online auctions is influenced by the inventory holding costs, bid traffic, and the dispersion of consumer's valuations."

"By conducting sequential auctions for the same product and observing the leading bids file, the auctioneer may learn about the customer's valuations for the product. Information collected in earlier auctions can be used to design later auctions."

"The profit-maximizing firm must decide how many units to offer in each auction, and how many auctions to run. To address these decisions we develop a dynamic optimization model using a Bayesian learning framework for analyzing auction data as the Internet auction site collects it. We show how the decisions about the lot size to be offered and the number of remaining auctions follow the optimal policy, and how they are reevaluated after each auction."

"In § 4 we extend our model to include the mechanism we have developed for analyzing auction data to improve future auctions. In this framework each auction provides the auctioneer with feedback that can be used to improve the auction design."

"We investigate the value of using this feedback in conjunction with the dynamic optimization of the auction design. We conduct an extensive set of numerical experiments and determine under what circumstances this sophisticated approach to auction design yields significant benefits to the auctioneer."

"Moreover, it is common to find sequences of auctions (typically on a daily basis), each offering multiple units of the same product. As a result, online auctioneers face several complicated design issues that have no satisfactory answers in traditional research on auctions, or in the classical work on logistics and inventory management."

"Suppose that the auctioneer has a fixed number of units to auction. He can offer the whole lot in one auction, or he can split it into multiple separate sequential auctions. Running a number of sequential auctions has the benefit of obtaining a higher price at each stage because fewer units are offered. On the other hand, each additional auction incurs both fixed costs and per unit costs for the units held in inventory and carried over from period to period. This raises two important design questions: (1) What is the optimal number of auctions that the auctioneer should run in order to maximize his total multi-period profits? (2) Given the optimal number of periods, what is the optimal number of units to offer in each auction?"

"In this section, we develop a multi-period model of a firm auctioning off an initial inventory of a product in "T" sequential auctions, each of duration t... The firm must select "T" so that total profit is maximized."

From the above disclosure, it is apparent that Pinker is directed towards researching the values of auction parameters conducted through numerous past auctions in order to maximize profit in a sequential auction transaction. It is obvious that based on past sequential auctions researched, that different sequential rules or patterns are observed. After all, if only one sequential rule was constantly being followed throughout the research process, then there would be no need at all to determine optimal parameters of sequences of auctions as directed by Pinker since the results would be unchanging. It is also unlikely that past auctions observed from different auctioneers through time would all be following or utilizing a constant auction sequence rule or pattern. It is thus evident that different or "multiple" auction sequence rules or patterns are disclosed by the cited reference. The limitation above as written, does not differentiate from the disclosure described above and is therefore interpreted broadly. The argued features of "simulating the multiple lot auction using a different sequencing rule until bidding on all lots is closed", as recited by claim 1, and argued by Appellant, is thus expressly taught and/or disclosed by Pinker. As such, the rejection with respect to claims 1-2 with regard to Pinker should be maintained accordingly.

Heimermann discloses as his invention a centralized, requisition-driven, order formulating, e-procurement method using a reverse auction. As such, the teachings of Heimermann are found in a field of endeavor, which, while not unrelated, is also within the scope and reasoning of one of ordinary skill in the art. Heimermann is relied upon to disclose the recited feature comprising:

- Comparing results of the simulated auctions with both sequencing rules.

The 02 February 2008 Office Action points to Heimermann, col. 36, lines 32-43, which recites:

"(e) a method of order formulation as to goods and services within said spot purchase pool, comprising: (1) applying comparative analysis to outcomes of prior purchasing, including prior purchase experience in said reverse-auction, as to quality of goods and services purchased,... to derive procurement strategies and a digital, rule-based decision structure set by said central purchasing authority of reverse-auction purchasing tactics... "

As described above, Pinker discloses multiple sequencing rules. From the above disclosure, it is apparent that Heimermann discloses the comparison of results of auctions conducted. The limitation above as written, does not differentiate from the disclosure described above and is therefore interpreted broadly. The argued features of "comparing results of the simulated auctions with both sequencing rules", as recited by claim 1, and argued by Appellant, is thus expressly taught and/or disclosed by Heimermann. As such, the rejection with respect to claim 1 with regard to Pinker and Heimermann should be maintained accordingly.

Heimermann is also relied upon to disclose the recited feature comprising:

- Wherein simulating the multiple lot auction with each sequencing rule comprises simulating a multiple lot, reverse auction.

The 02 February 2008 Office Action points to Heimermann, col. 36, lines 56-65, which recites:

"(2) using an online application form on a Web site on the Internet for conducting e-procurement transactions by way of reverse-auction..."

As described above, Pinker discloses multiple sequencing rules. From the above disclosure, Heimermann discloses wherein it is well known in the art for reverse-auctions to be utilized. The limitation above as written, does not differentiate from the disclosure described above and is therefore

interpreted broadly. The argued features of "wherein simulating the multiple lot auction with each sequencing rule comprises simulating a multiple lot, reverse auction", as recited by claim 1, and argued by Appellant, is thus expressly taught and/or disclosed by Heimermann. As such, the rejection with respect to claim 2 with regard to Pinker and Heimermann should be maintained accordingly.

Wurman discloses as his work, the specification of rules for electronic auctions. In Wurman, the design space of auction mechanisms are examined and core activities that structure this space are identified. Formal parameters qualifying the performance core activities enables precise specification of auction rules. The specification provides a framework for organizing previous work and identifying new possibilities in auction design. As such, the teachings of Wurman are found in a field of endeavor, which, while not unrelated, is also within the scope and reasoning of one of ordinary skill in the art. Wurman is relied upon to disclose the recited feature comprising:

- Wherein the sequencing rules determine how closing times for accepting any bids are ordered among each of the lots.

The 02 February 2008 Office Action points to Wurman, page 11, par. 6; page 12, par. 1-3, which recites:

"The enforcement of bidding rules occurs when the auction receives a bid. However, the generation of price information and the computation may be triggered in a variety of ways. The result is that an auction may interleave these three activities in complex ways governed by the associated rules and the sequence of bids received."

"Clear events can be initiated by the admittance of a new bid, tied to a fixed schedule, or triggered randomly or by a lack of bidding activity."

"Finally, the auction design must specify the logical conditions that close the auction. Auctions can close at a fixed time, after a period of inactivity, when a transaction occurs, or at a random time."

From the above disclosure, Wurman discloses the specification of conditions and sequencing rules that govern the closing times of an auction. The limitation above as written, does not differentiate from the disclosure described above and is therefore interpreted broadly. The argued features of "wherein the sequencing rules determine how closing times for accepting any bids are ordered among each of the lots", as recited by claim 2, and argued by Appellant, is thus expressly taught and/or disclosed by Wurman. As such, the rejection with respect to claim 2 with regard to Pinker, Heimermann and Wurman should be maintained accordingly.

Appellants further argue that it would not have been obvious to one of ordinary skill in the art to modify Pinker to simulate different sequencing rules.

In response to Appellant's argument that the cite references teach away from the combinations and modifications proposed by the Office Action in rejecting claims 1-2, the Examiner also recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention when there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Examiner would also like to point out that a proper combination under U.S.C. 103 does not require bodily incorporation of the teaching of one reference into another, paying no attention to what the artisan of ordinary skill would consider in making the combination. See In re Keller, 642 F.2d 413,208 USPQ 871 (CCPA 1981).

With regard to Pinker and Heimermann, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as disclosed by Pinker, with the method, as taught by Heimermann, for the motivation of deriving cost-effective procurement strategies and a rule-based decision structure of reverse-auction purchasing tactics (see at least Heimermann, column 36, lines 37-43).

With regard to Pinker and Wurman, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as disclosed by Pinker, with the method, as taught by Wurman, for the motivation of specifying the logical conditions that close an auction (Wurman, page 12, paragraph 2).

Claims 9, 13 & 18

With regard to claims 9, 13 and 18, Appellants argue that Pinker, Wurman and Jarvis do not disclose the recited feature comprising using a plurality of sequencing rules for simulating an auction.

The Office strongly and respectfully disagrees, and maintains that the prior art references, used in rejecting the claims, clearly and expressly discloses all the recited features of the claims, as currently presented, and that Applicant has misinterpreted and/or not fully considered all the teachings and disclosures of the prior arts of record.

As described in the rejection of claim 1 above, Pinker discloses using a plurality of sequencing rules for simulating an auction. The same reference and rationale basis is used in the rejection with regards to claims 9, 13 and 18 comprising the recited feature of using a plurality of sequencing rules for simulating an auction.

Appellants further argue that it would not have been obvious to one of ordinary skill in the art to modify Pinker to simulate different sequencing rules.

In response to Appellant's argument that the cite references teach away from the combinations and modifications proposed by the Office Action in rejecting claims 9, 13 and 18, the Examiner also recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention when there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Examiner would also like to point out that a proper combination under U.S.C. 103 does not require bodily incorporation of the teaching of one reference into another, paying no attention to what the artisan of ordinary skill would consider in making the combination. See In re Keller, 642 F.2d 413,208 USPQ 871 (CCPA 1981).

Jarvis discloses as his invention a commodity management system. The invention relates generally to commodity management and, more particularly, to a system and method for establishing the price of a commodity by studying the costs related to providing the commodity. As such, the teachings of Jarvis are found in a field of endeavor, which, while not unrelated, is also within the scope and reasoning of one of ordinary skill in the art. Jarvis is relied upon to disclose the recited feature comprising:

- Determine a metric associated with each simulated multiple lot auction, the metric usable to evaluate results of the simulated multiple lot auction.

The 02 February 2008 Office Action points to Jarvis, par. 11-13, which recites:

"An actual cost for each cost driver is determined for each of the plurality of suppliers, and the lowest actual cost for each cost driver is combined to create the Best in Class cost model for the commodity."

"Yet another aspect of the disclosure involves a method for analyzing costs of a commodity by analyzing the commodity to determine cost drivers associated with supplying the commodity and determining a supplier-specific cost for each cost driver for a plurality of suppliers of the commodity."

"An industry mean for each cost driver is calculated based on the supplier-specific cost to create an industry mean cost model."

From the above disclosure, Jarvis discloses the use of cost metrics as a measure of efficiency in dealing with purchases from suppliers. The limitation above as written, does not differentiate from the disclosure described above and is therefore interpreted broadly. The argued features of "determine a metric associated with each simulated multiple lot auction, the metric usable to evaluate results of the simulated multiple lot auction", as recited by claims 9, 13 and 18, and argued by Appellant, is thus expressly taught and/or disclosed by Jarvis.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Pinker, with the method, as taught by Jarvis, for the motivation of establishing a cost model which can be used to obtain lower prices (Jarvis, Abstract, lines 4-9).

As such, the rejection with respect to claims 9, 13 and 18 with regard to Pinker, Wurman and Jarvis should be maintained accordingly.

Claims 3-8, 14-17 and 22

With regard to claims 3-8, 14-17 and 22, Appellants argues that each of the claims depend from claims that contain limitations not found in the prior art references. Accordingly, claims 3-8, 14-17 and 22 are believed to be in condition for allowance as each is dependent from an allowable base

claim. However, since it has been established previously that base claims 1-2, 9, 13 and 18 are disclosed by the prior art reference(s) used in the rejection of the claims, and since the claims depend on their respective parent claims - inheriting all of their features - the rejection of the dependent claims are accordingly maintained at least for the same reasons provided above for claims 1-2, 9, 13 and 18 the base claim being unpatentable over the 1-2, 9, 13 and 18 prior art reference.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, having shown that cited references expressly teaches and discloses all the recited features of independent claims 1-2, 9, 13 and 18, the Office firmly asserts that the rejection of the claimed invention should be sustained.

Respectfully submitted,
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10 November 2008

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